

# Motorized Helicopter Kit

OWNER'S MANUAL — Please read before using this equipment.

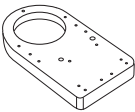
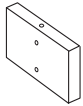



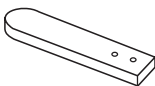
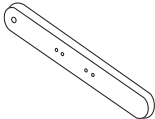
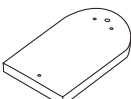
Your RadioShack Motorized Helicopter Kit is easy and fun for children (ages 8 and up) to put together! When you connect all the parts, you can learn how the gears and motor work together to move the helicopter. You can also paint and decorate the helicopter any way you like! You may need help from a parent or an adult to make some of the connections. You need a Phillips screwdriver and a mini hammer to build your helicopter, as well as two AA batteries (not supplied) for power.

**Hint:** To make it easier to thread the screws, we recommend using a screwdriver with a magnetized head.

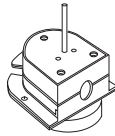
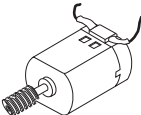
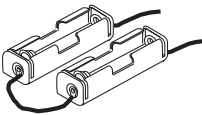


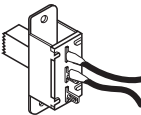

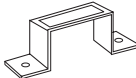




## INCLUDED PARTS

Make sure all these parts are included in your kit.

### Wooden Parts

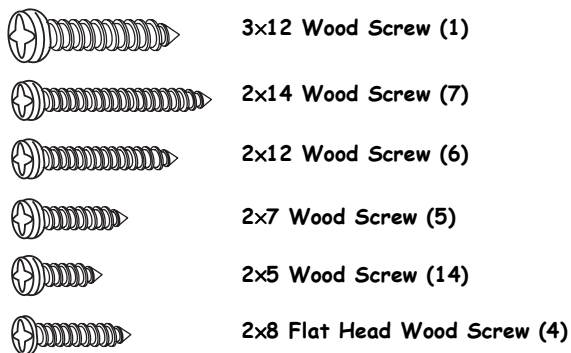
Part	Description
	Body
	Rear Support Plane
	Vertical Fin
	Tail Rotor
	Main Rotor Base
	Rotor Blade (3)
	Side Panel (2)
	Top Cover

## Other Parts

Part	Description
	Gear Box
	Motor
	Battery Case
	Wheel Shaft Strut (2)
	Rotor Shaft Sleeve
	Switch
	PVC Tubes (3)
	Motor Bracket
	Wheel Hub (2)
	Tire (2)
	L-Connector (2)
	Wheel Shaft

Fun for children ages 8+! Learn about motors, mechanics, and gears!

## Screws



## OPTIONAL ITEMS

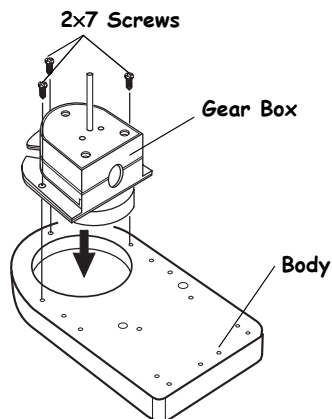
You can use paint, stickers, markers, or other ornamental items to decorate your helicopter.

**Hint:** If you want to paint your helicopter, it is easier to do so before you assemble the parts.

## MAKING THE CONNECTIONS

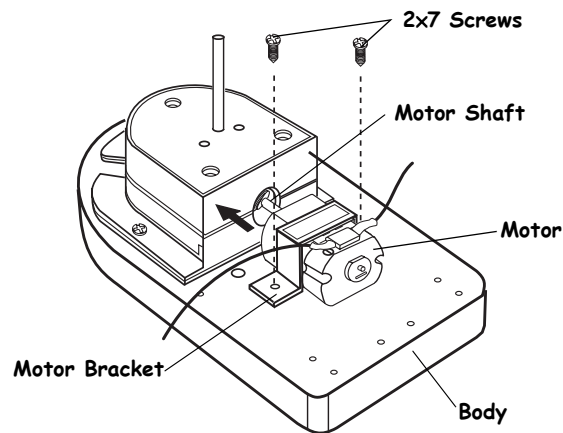
Before you make any connections, make sure you have all the parts (count the screws)! Place the screws in a box or container (with a magnet) so they do not roll off your work surface. When making the connections, be sure not to overtighten the screws.

### Mounting the Gear Box



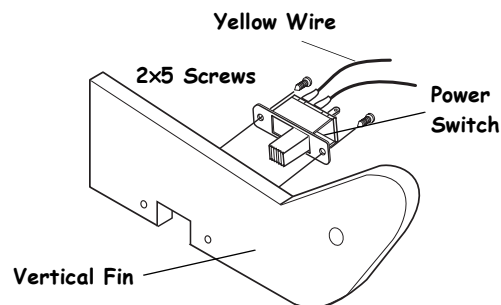
1. Turn the body over and align the three screw holes on the gear box with the matching screw holes on the body.
2. Drive a 2x7 wood screw into each of the screw holes to mount the gear box on the body.

## MOUNTING THE MOTOR



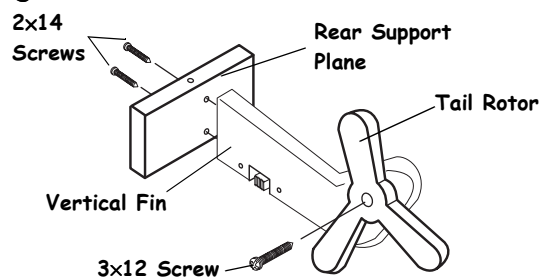
1. Place the motor pad-side down on the body.
2. Insert the motor's shaft into the round hole in the gearbox, so the gear on the motor's shaft engages with the gear in the gearbox.
3. Align the motor bracket's two screw holes with the two matching holes on the body.
4. Drive a 2x7 wood screw into each of the motor bracket's screw holes to mount the motor on the body.

### Mounting the Power Switch



1. Place the switch on the rear support plane so the yellow wire is positioned as shown.
2. Align two screw holes on the switch and on the vertical fin.
3. Drive a 2x5 wood screw into each of the power switch's screw holes to mount the switch on the vertical fin.

### Mounting the Tail Rotor



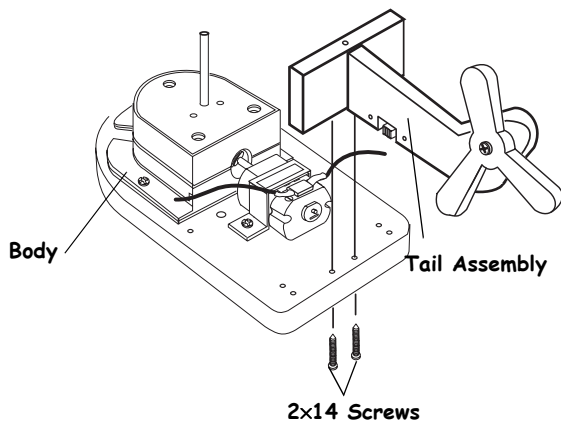
1. Align the screw hole on the tail rotor with the matching hole on the vertical fin.

2. Drive the 3×12 wood screw into the tail rotor's screw hole to mount the tail rotor on the vertical fin.

Do not tighten the screw all the way down. Leave some slack to allow the tail rotor to freely spin.

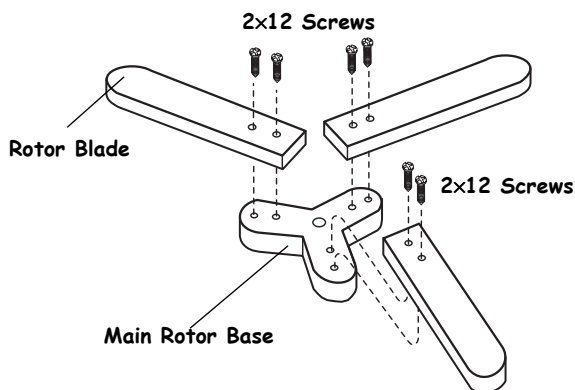
3. Align the two screw holes on the vertical fin with the matching holes on the rear support plane as shown.
4. Drive a 2×14 wood screw into each of the rear support plane's screw holes, as shown, to mount the vertical fin on the rear support plane.

## Mounting the Tail Assembly



1. Align the two screw holes on the tail assembly with the matching holes on the body as shown.
2. Drive a 2×14 wood screw into each hole to mount the tail assembly on the body.

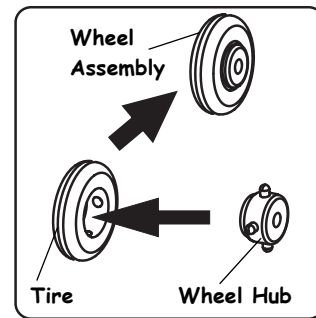
## Assembling the Main Rotor



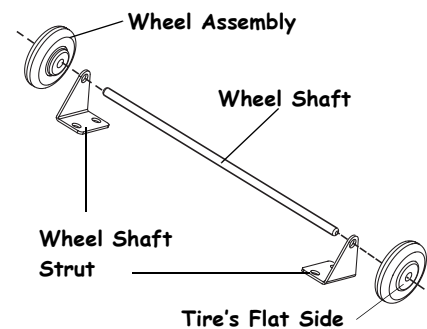
1. Align the two screw holes on one of the rotor blades with the matching holes on the main rotor base.
2. Drive a 2×12 wood screw into each of the two holes to mount the rotor blade on its base.
3. Repeat Steps 1 and 2 to mount the other two rotor blades on the main rotor base.

## Assembling the Rear Wheels

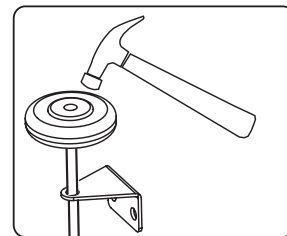
1. Mount the tire on the plastic wheel hub, making sure the four indentations inside the tire fit around the four pins on the wheel hub.



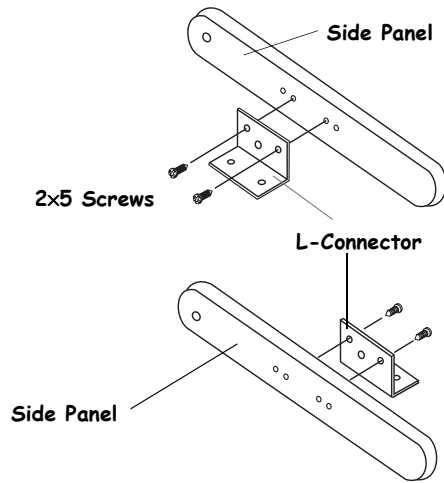
2. Repeat Step 1 to mount the other tire on its hub.
3. Align the wheel assembly's center hole with the wheel shaft strut's hole. Make sure the flat side of the hub faces away from the wheel strut and shaft. Then push the wheel shaft through both holes.



4. Repeat Step 3 to mount the other wheel assembly on the other end of the wheel shaft.
5. Position one end of the wheel shaft on a hard surface (such as a block of wood), then use a mini hammer to gently hammer down the upper wheel so both wheels are securely fixed on the wheel shaft.

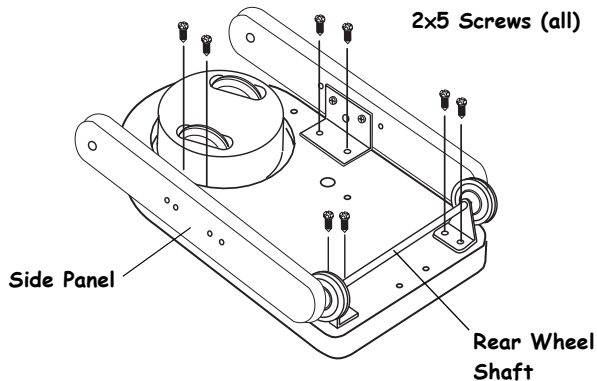


## Mounting the L-Connectors



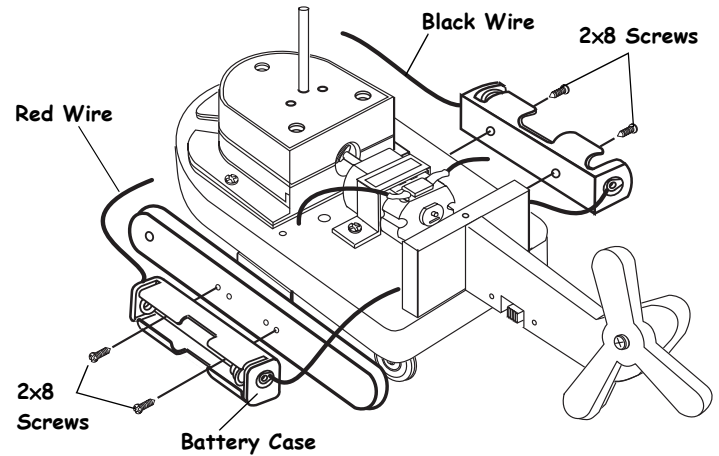
1. Align the two screw holes on the L-connector with the matching holes on a side panel as shown.
2. Drive a 2x5 wood screw into each hole to mount the L-connector onto the side panel.
3. Repeat Steps 1 and 2 to mount the other L-connector onto the other side panel.

## Mounting the Rear Wheel Assembly and the Side Panels



1. Turn the body over, so the gear box and motor are underneath.
2. Align the two screw holes on each rear wheel shaft strut with the matching holes on either side of the body.
3. Drive a 2x5 wood screw into each of the struts' screw holes to mount both wheel shaft struts on the body.
4. Align the two screw holes on the L-connector with the matching screw holes on the body as shown.
5. Drive a 2x5 wood screw into each L-connector's screw hole to mount the side panel on the body.
6. Repeat Steps 4 and 5 to mount the other side panel.

## Mounting the Battery Cases



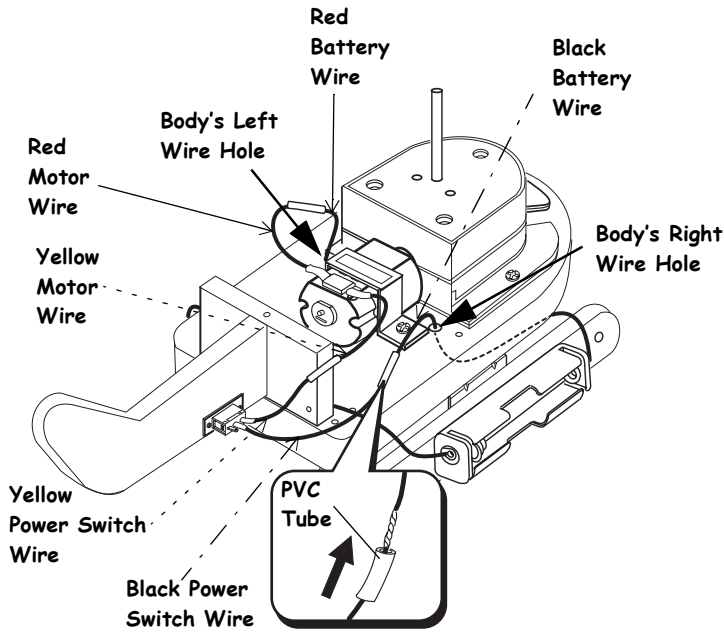
**Note:** On the battery case, the side with the red wire is the left battery side, and the side with the black wire is the right side.

1. Place the left side of the battery case on the left side panel so the red wire faces toward the front of the helicopter.
2. Use two of the flat head 2x8 wood screws to secure the left side of the battery case to the left panel.
3. Place the right side of the battery case on the right side panel so the black wire faces toward the front of the helicopter.

Make sure the black wire connecting the two sides of the battery case goes over the top of the body, rather than underneath the helicopter.

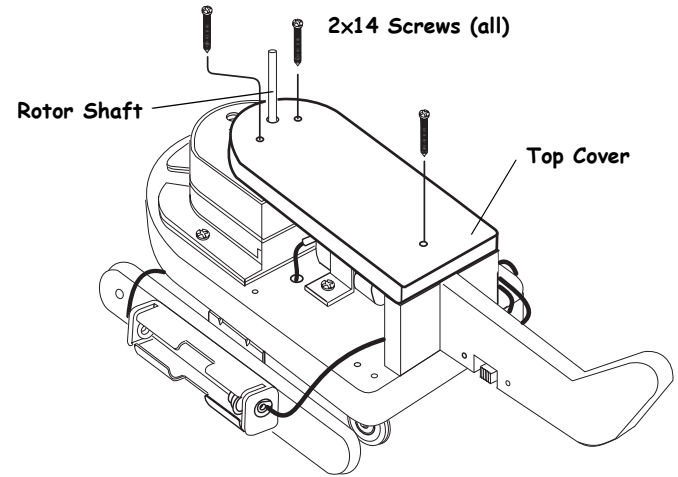
4. Use the remaining two flat head 2x8 wood screws to secure the right side of the battery case to the right panel.

## Connecting the Wires



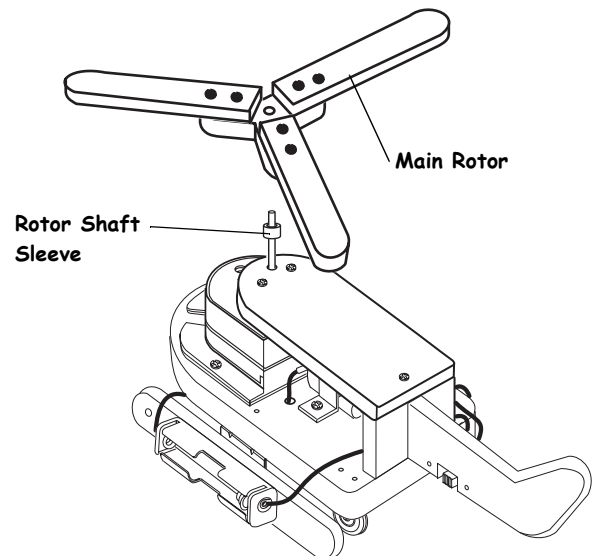
1. Slide a PVC tube over the motor's red wire.
2. Insert the battery case's red wire through the body's wire hole as shown.
3. Twist the motor's red wire and the battery case's red wire together, making sure they are securely connected. Then push the PVC tube down to cover the twisted wire ends.
4. Slide a PVC tube over the power switch's black wire.
5. Insert the battery case's black wire through the body's wire hole as shown.
6. Twist the power switch's black wire and the battery case's black wire together, making sure they are securely connected. Then push the PVC tube down to cover the twisted wire ends.
7. Slide a PVC tube over the power switch's yellow wire.
8. Twist the power switch's yellow wire and the motor's yellow wire together, making sure they are securely connected. Then push the PVC tube down to cover the twisted wire ends.

## Mounting the Top Cover



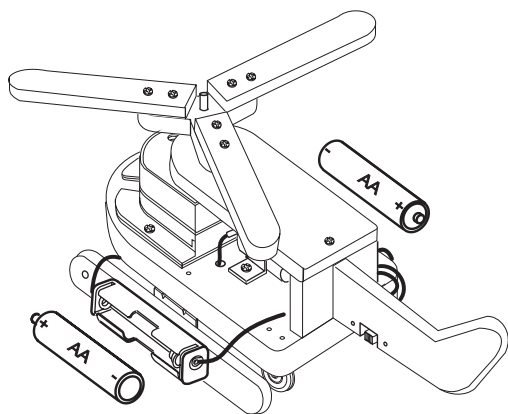
1. Align the rotor shaft on the gear box with the matching hole on the top cover and slide the top cover down.
2. Align the three screw holes on the top cover with the screw holes on the gear box and on the rear support plane as shown.
3. Drive a 2x14 wood screw into each of the screw holes to mount the top cover on the gear box and the rear support plane.

## Mounting the Main Rotor



1. Place the plastic rotor shaft sleeve onto the rotor shaft and slide it down so it is flush with the top cover.
2. Align the center hole on the main rotor with the rotor shaft.
3. Push the main rotor onto the rotor shaft as shown.

# INSTALLING BATTERIES



Your helicopter requires two AA batteries (not supplied) for power. For the best performance and longest life, we recommend RadioShack alkaline batteries.

## Cautions:

- Use only fresh batteries of the required size and recommended type.
- Do not mix old and new batteries, different types of batteries (standard, alkaline, or rechargeable), or rechargeable batteries of different capacities.

Set the power switch to the off position (toward the tail rotor). Then place the batteries in the battery cases on

both sides of the helicopter according to the battery symbol (☐) marked inside the cases.

When the power seems weak or the helicopter stops operating properly, replace the batteries.

**Warning:** Dispose of old batteries promptly and properly. Do not burn or bury them.

**Caution:** If you do not plan to use the helicopter for a month or longer, remove the batteries. Batteries can leak chemicals that can destroy electronic parts.

# OPERATION

## Warnings:

- Do not place fingers or other objects inside the helicopter's body.
  - Do not touch the main rotor while it is rotating.
1. Place the helicopter on a wide, flat surface.
  2. Slide the power switch left to turn on the power. The helicopter's motor rotates the gears and the helicopter move.
  3. To stop the helicopter, lift it off the ground and slide the power switch off.

## Limited Ninety-Day Warranty

This product is warranted by RadioShack against manufacturing defects in material and workmanship under normal use for ninety (90) days from the date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. EXCEPT AS PROVIDED HEREIN, RadioShack MAKES NO EXPRESS WARRANTIES AND ANY IMPLIED WARRANTIES, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE, ARE LIMITED IN DURATION TO THE DURATION OF THE WRITTEN LIMITED WARRANTIES CONTAINED HEREIN. EXCEPT AS PROVIDED HEREIN, RadioShack SHALL HAVE NO LIABILITY OR RESPONSIBILITY TO CUSTOMER OR ANY OTHER PERSON OR ENTITY WITH RESPECT TO ANY LIABILITY, LOSS OR DAMAGE CAUSED DIRECTLY OR INDIRECTLY BY USE OR PERFORMANCE OF THE PRODUCT OR ARISING OUT OF ANY BREACH OF THIS WARRANTY, INCLUDING, BUT NOT LIMITED TO, ANY DAMAGES RESULTING FROM INCONVENIENCE, LOSS OF TIME, DATA, PROPERTY, REVENUE, OR PROFIT OR ANY INDIRECT, SPECIAL, INCIDENTAL, OR CONSEQUENTIAL DAMAGES, EVEN IF RadioShack HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

Some states do not allow limitations on how long an implied warranty lasts or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you.

In the event of a product defect during the warranty period, take the product and the RadioShack sales receipt as proof of purchase date to any RadioShack store. RadioShack will, at its option, unless otherwise provided by law: (a) correct the defect by product repair without charge for parts and labor; (b) replace the product with one of the same or similar design; or (c) refund the purchase price. All replaced parts and products, and products on which a refund is made, become the property of RadioShack. New or reconditioned parts and products may be used in the performance of warranty service. Repaired or replaced parts and products are warranted for the remainder of the original warranty period. You will be charged for repair or replacement of the product made after the expiration of the warranty period.

This warranty does not cover: (a) damage or failure caused by or attributable to acts of God, abuse, accident, misuse, improper or abnormal usage, failure to follow instructions, improper installation or maintenance, alteration, lightning or other incidence of excess voltage or current; (b) any repairs other than those provided by a RadioShack Authorized Service Facility; (c) consumables such as fuses or batteries; (d) cosmetic damage; (e) transportation, shipping or insurance costs; or (f) costs of product removal, installation, set-up service adjustment or reinstallation.

This warranty gives you specific legal rights, and you may also have other rights which vary from state to state.

RadioShack Customer Relations, 200 Taylor Street, 6th Floor, Fort Worth, TX 76102

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